

## **CHAINSAW TRAINING**

**4031**

(No. 23 August 2007)

## **FIRE CHAINSAW TRAINING**

**4031.1**

(No. 23 August 2007)

## **REQUIRED TRAINING**

**4031.1.1**

(No. 23 August 2007)

All firefighters as defined in 1780.2 operating chain saws (including inmates, wards, and CCC Corps members staffing CAL FIRE Fire Crews) shall perform all chain saw operations and related activities in accordance with CAL FIRE Handbook 1700 § 1780 §1781.13. USDA Forest Service Publications FSM 6700 and FSH 6709.11 shall be used as reference documents only.

All chain saw training and certification shall use, either in part (as in Class A) or in total (as in Class B), the current edition of National Wildfire Coordinating Group (NWCG) curriculum, S-212 Wildfire Power Saws for firefighting personnel. Chain saw operators at the “A” Level may be limited to “Structure / Rescue Ops”, “Brushing”, and/or “Limbing”, or any combination of the above. This limitation will be noted on the reverse side of the Chain Saw Certification Card.

The time frame for course completion and delivery may be at the discretion of the instructor. Employees in training status may continue to operate a chain saw only under direct and constant supervision of a qualified chain saw operator. Chain saw operations shall be prohibited except in emergencies where life is threatened, *unless* an operator has successfully completed training and certification. All firefighting personnel who will be involved with Structure / Rescue operations at structure fires must complete training in “Structure Ops”. This training will involve both classroom lecture and field exercises. The lecture, a minimum of four (4) hours, will cover NWCG S-212 Units 1 & 2 as appropriate for Structure / Rescue operations. The field training exercise will consist of four (4) hours, at minimum, in the performance of chain saw operations on structure or rescue props.

## **STANDARD OPERATING PROCEDURES (SOP)**

**4031.1.2**

(No. 23 August 2007)

When operating a chain saw, employees will adhere to the following Standard Operating Procedures (SOP's)

- Utilize all appropriate safety equipment and clothing
- Start, grip and use chain saw in a safe manner
- Use appropriate wedges, axe and bar length
- Establish an effective escape path prior to undercutting
- Undercut and back cut on all trees at a safe standing height
- Insert the horizontal cut level and at an appropriate depth

- Angle the sloping cut for maximum undercut opening
- Do not use any form of Dutchman or Swing cut
- Maintain 2 inches, or as appropriate, amount of holding wood at both corners on each tree
- Maintain at least 2" of stump shot on each tree
- Gun each undercut properly to insure falling accuracy
- Adhere to standard falling procedure on each tree
- Quickly escape once the tree is committed to the undercut
- Maintain a safe distance from others (swampers, fallers)
- Be particularly aware of overhead dangers at all times
- Give a warning shout prior to falling (ie-falling across a hill)
- Halt falling if tree tops are obscured by darkness, smoke or fog
- Beware that fatigue may greatly influence judgment
- Avoid any sawing activity considered unusually dangerous
- Seek advice and assistance whenever necessary
- Adhere to the 10 Standard Fire Orders

## **CERTIFICATION REQUIREMENTS-GENERAL**

**4031.1.3**

(No. 23 August 2007)

Instructors have complete authority to limit the scope of the certification. They may impose time, project, or size limitations at their discretion. The Unit CSP Instructor shall ensure that a certificate of training is completed and maintained for each person who successfully completes the training and certification.

People who successfully complete the initial certification shall receive a CAL FIRE Chain Saw Certification Card for the appropriate level of training received: Class A, Class B, Class C. Certification cards are valid for 3 years. Any limitations will be noted on the reverse of the Chain Saw Certification Card. When the card expires, the individual must be field tested and re-certified (See Section 4031.3 Re-Certification).

An appropriate CAL FIRE Instructor shall sign as the Approving Instructor on the card. The Region Chief, Unit Chief or designee shall sign as the Approving Official on the certification card. The Assistant Chief or Battalion Chief in conjunction with the Unit CSP Instructor has the authority and responsibility in determining whether or not an employee is considered trained and qualified.

All chain saw operators shall attend a minimum of one (1) re-certification session as outlined in Handbook Section 4031.3

Regardless of outside agency training and certification that an employee may hold he/she will only operate a chain saw within the limits of the CAL FIRE Class A, Class B or Class C certification cards that the employee holds.

## QUALIFICATIONS FOR CERTIFICATION

4031.1.4

(No. 23 August 2007)

Region or Unit CSP Instructors shall identify operating limitations of the individual chain saw operator on the certification card when appropriate. Limitations should refer to chain saw operations such as "limbing only," "bucking only," "limbing and bucking only," or "brushing only."

All firefighters as defined in 1780.2 operating chain saws (including inmates, wards, and CCC Corps members staffing CAL FIRE Fire Crews) must complete the classroom portion of NWCG S-212 Wildfire Power Saws appropriate for the level of training. All chain saw operators shall then attend a field qualification session after completion of initial chain saw training.

A minimum of two (2) instructor signatures are required for C-Faller (advanced) certification. The certifying signature must not be from the student's home unit.

## LEVELS OF CHAIN SAW CERTIFICATION

4031.2

(No. 23 August 2007)

### CLASS A (BASIC)

4031.2.1

(No. 23 August 2007)

Chain saw operators certified at this level are considered inexperienced. Chain saw operators are primarily limbing, brushing, and bucking. Felling should only be performed in the least complex situations. Class A (Basic) saw operators are limited to felling **material up to eight (8) inches in diameter**. Class A saw operators are further limited to falling only sound, living trees. Class A (Basic) certified chain saw operators using chain saws for bucking are limited to **material up to twelve (12) inches in diameter**. Minimum requirements include the successful completion of the classroom portion of NWCG S-212 Wildfire Power Saws appropriate to the elements being evaluated on the "A" certification card. Additionally, the student will demonstrate their ability in chain saw operations to the satisfaction of the instructor. Operators at this level can perform at the next higher level as a trainee under direct supervision of a certified operator at that level. Basic certified chain saw operators are authorized to buck larger material in an emergency where life or property is threatened. The instructor will determine if additional field training is required based on previous experience and field examination of the trainee.

## **CLASS B (INTERMEDIATE)**

**4031.2.2**

(No. 23 August 2007)

Chain saw operators certified at this level are considered more experienced. Intermediate chain saw operators using chain saws for felling, limbing, brushing and bucking are limited to **material under twenty four (24) inches in diameter** including: straight, normally growing, green trees; green trees with some defect, although mostly sound; and green trees with slight lean. Class B saw operators may also fall snags that do not have significant potential for material falling from above. Minimum requirement includes the successful completion of NWCG S-212 Wildfire Power Saws.

Operators at this level can perform at the next higher level as a trainee under direct supervision of a C-level certified chain saw operator. The instructor may make modifications to tailor the certification to specific work applications.

## **CLASS C (ADVANCED)**

**4031.2.3**

(No. 23 August 2007)

Class C (Advanced) chain saw operators are considered skilled in the most complex cutting situations or felling and bucking **material over twenty four (24) inches in diameter**.

Minimum requirement includes the successful completion of NWCG S-212 Wildfire Power Saws and an advanced felling certification session.

## **CLASS C CERTIFIER**

**4031.2.4**

(No. 23 August 2007)

Includes individuals who are currently Class C advance chain saw operators and have been further trained through a formal program to organize and conduct field certification sessions. They have demonstrated communication skills, the ability to transfer and relate concepts to others, and current knowledge of policy and regulations pertaining to chain saws and related equipment. "C-Certifiers" must conduct a minimum of one (1) field certification session per year to maintain a valid certificate. Initial certification at this level will be conducted by one (1) "C-Certifier" and one (1) industry faller approved by the by Region CSP to serve as a professional consultant. C-Certifiers must maintain valid C-Faller certification.

## **REVOKING OF C-CERTIFIER/C-FALLER CERTIFICATION**

**4031.2.5**

(No. 23 August 2007)

An employee's C-Certifier and/or C-Faller certification may only be revoked by a Chain Saw Program Review board (CSPRB) consisting of:

- CAL FIRE Academy Representative
- Region Training Chief

- Region Chain saw Coordinator
- Department Safety Officer (12/14/06 rev)

The review board may consult a professional consultant/instructor/feller technical specialist for technical assistance and recommendations. The Chain Saw Program Review Board (CSPRB) will base their decision on Standard Operating Procedure (SOP) violations resulting in unsafe conditions to self and/or others.

## **RE-CERTIFICATION**

**4031.3**

(No. 23 August 2007)

All firefighters as defined in 1780.2 operating chain saws (including inmates, wards, and CCC corps members staffing CAL FIRE Fire Crews) shall attend one (1) re-certification session after completion of initial chain saw training and certification prior to the certification card expiration date. Extensions may only be granted after this mandatory re-certification as outlined in Section 4031.5

If necessary, review the NWCG S-212, Wildfire Power Saws course, to take into account the experience of operators being re-certified. Emphasis should be placed upon practical exercises involving tree felling, bucking, and limbing. When possible and practical, re-certification can be accomplished on the operator's "typical" work project (including fire assignments). During re-certification, each operator must demonstrate that the expectations of their current class of operation can be performed successfully and safely.

## **MINIMUM RE-CERTIFICATION REQUIREMENTS**

**4031.3.1**

(No. 23 August 2007)

Class A (Basic) and Class B (Intermediate) re-certifications are valid for up to 3 (three) years. When certification expires, the individual shall require re-certification. (See Handbook Section 4031.3.2 regarding certification extensions.)

The minimum re-certification requirements for Class A and Class B are:

- Classroom review shall last a minimum of 2 hours and will involve applicable safety films, a review of relevant chain saw accidents, and job hazard analysis/situational awareness review.
- Hands-on field review conducted by a qualified instructor shall require that the operator perform work with material relevant to the certification. The Instructor shall sign the Approving Instructor block on the A and B cards. The Unit Chief or designee shall sign as the Approving Official. Class C (Advanced) chain saw operator re-certifications are valid for 3 years. When the card expires, the individual will need to be field tested for re-certification. (See Handbook Section 4031.3.2 regarding certification extensions.)

The minimum re-certification requirements are:

- Classroom review shall last a minimum of 2 hours and involve applicable safety films, a review of relevant chain saw accidents, and job hazard analysis/situational awareness review.
- Hands-on field review, conducted by a C-Certifier qualified instructor, shall require that the operator perform work with material consistent with the size indicated by the certification standards.
- The Operator must attend a Regional C-Level or recert class
- The card must be signed by two C-certifiers from a Unit other than the operator's home unit.
- The Region Chief or designee shall sign the Approving Official block.
- C-Certifier re-certifications are valid for one year. (See Handbook Section 4044.6 regarding C Certifier extensions.)
- Initial certification at this level will be conducted by one (1) "C Certifier" and one (1) industry faller approved by the by Region CSP to serve as a professional consultant during a CAL FIRE Academy sponsored C-Certifier training session.

## **CERTIFICATION CARD EXTENSIONS**

**4031.3.2**

(No. 23 August 2007)

The Unit Chief or designee together with the Unit CSP Instructor have the authority to grant an extension for a re-certification card for those employees who qualify and have demonstrated an incident or accident free record while operating chain saws. Unit CSP instructors shall review all incident and accident records for documentation to determine employee eligibility. "C- Certifiers" must conduct a minimum of one (1) field certification session annually to maintain a valid certificate.

## **CERTIFICATION CARDS**

**4031.3.3**

(No. 23 August 2007)

The Academy will maintain adequate supplies of blank certification cards for Class A, Class B, and Class C. Only Region or Unit CSP instructors are authorized to obtain blank certification cards. The CAL FIRE "C-Certifier" course coordinator will maintain a current listing of all qualified Region or Unit CSP instructors. The Region CSP or C-Certifier Class Coordinator will distribute blank certification cards to only those instructors listed as qualified. (See exhibit "[CAL FIRE Chain Saw Certification Cards](#).") "C-Certifier" certification cards will only be issued by the Academy after successful completion of the Academy sponsored "C-Certifier" course. (See 4031.3.3.1 "[CAL FIRE Chain Saw Certification Cards](#).")

## **DOCUMENTATION**

**4031.3.4**

(No. 23 August 2007)

Record management is critical to the success of the CAL FIRE Chain Saw Program. All training and certification will be documented utilizing the IIPP- 6 and the applicable training management records program.

All instructors and training and safety chiefs shall maintain chain saw training and certification records. All reportable accident and/or incidents shall be forwarded as outlined per CAL FIRE policy. All inmate/ward saw training will be documented on an IIPP-6, and on an "Informational Behavior Report" (ward), or a "CDC 128B Informational Chrono". These records are to be kept at the camp. Records (training, certification and reportable accidents) are to be maintained for a minimum of seven (7) years.

## **UNIT IMPLEMENTATION PROCESS**

**4031.4**

(No. 23 August 2007)

1. The Unit CSP Instructor and the Unit Training and Safety Chief shall introduce the program to Assistant Chiefs and Battalion Chiefs who have overall administrative responsibility for the Chain Saw Program.
2. The Unit Training Chief shall assess their Unit, through each Assistant Chief and/or Battalion Chief, for individuals who will be using chain saws.
3. Assistant Chiefs and/or Battalion Chiefs, in conjunction with the Unit CSP Instructor, should identify employees based on operational and employee certification goals (cannot force employees to rate at a specified level) into the following groups:
  - Class A - Basic chain saw operators
  - Class B - Intermediate chain saw operators (Intermediate Instructors).
  - Class C - Advanced chain saw operators. (Advanced Instructors)
  - Class C-Certifier (Unlimited Instructors)
4. The Unit CSP Instructor shall research local industry sources for chain saw instructor (professional consultant) expertise in felling, bucking, limbing, and other chain saw operations. Once located and approved by the Unit CSP Instructor, the Unit CSP Instructor shall forward the names of candidates to the Region CSP Instructor for possible use as a professional consultant in the CAL FIRE Academy sponsored C- Certifier training. The Region CSP will then forward candidate names to the CAL FIRE C-Certifier Class Coordinator at the CAL FIRE Academy. Suggested below are guidelines to follow when selecting the professional consultant/instructor/feller technical specialist for the C Certifier training.

It is highly recommended that these individuals come from the timber falling industry:

- Demonstrated ability to instruct, work with the chain saw, and communicate well with large and small groups.
  - Five (5) years minimum experience, 10 years for felling.
  - References from peers or employers, which qualify the person as an expert or professional in the field.
  - Ensure that the professional consultant/instructor/feller technical specialist follows the falling guidelines established at the CAL FIRE Academy sponsored C Certifier sessions.
5. Upon satisfactory completion of the first verification process for Class C chain saw operators, the Unit CSP Instructor shall sign a training certificate and certification card.
  6. During the certification process of the Class "C" group, the Unit CSP Instructor should identify those people that possess the practical skills, knowledge, and positive attitudes to be considered for Unlimited Instructor (C-Certifier qualified) responsibilities.
  7. After certification of the Class C group, and with the nomination of individuals for C-Certifier positions, the Unit/Training and Safety Chief and Unit CSP Instructor shall discuss the selection with the Unit Chief or designee. Time, energy, and dollar commitment of the particular individual selected should be considered prior to appointment.
  8. Once the Instructors for Class A, Class B, and Class C training and certification have been selected, the Unit Training and Safety Chief and Unit CSP Instructor shall hold a session with all instructors to develop the program in that Unit as stated in this policy. Classes for personnel are then scheduled as needed.



## **MONITORING**

(No. 23 August 2007)

**4031.5**

Monitoring is critical to the prevention of chain saw accidents and injuries. This section deals with follow-up of instructors and operators to assure correct chain saw operating procedures.

The Region CSP coordinator shall observe conditions of chain saw use in the course of activity reviews or other periodic inspections to ensure that workers are using acceptable procedures for tree felling and other chain saw operations.

The Unit CSP Instructors shall observe conditions of chain saw use in the course of daily activity reviews or other periodic inspections to ensure that workers are using acceptable procedures for tree felling and other chain saw operations.

The evaluation procedure shall involve:

- Review of operator's training, certification, and re-certification (Unit CSP Instructors).
- Review of felling methods and operator understanding of felling cuts and their relationship to each other, wedges, escape routes, procedural felling steps, and other critical points of chain saw use.
- Use of personal protective equipment.
- Review of IIPP Project Safety Work Plans.
- Periodically review documentation of safety and tailgate meetings.
- Observation of unsafe practices and institute corrective actions.
- Review of supervision and instruction of operators who are in training status or who have a restricted operation.
- Use of "stump reading" to judge the quality of felling work (Also a useful self-teaching tool for an operator).
- Encouragement of both announced and unannounced chain saw project inspections.
- Steps to ensure the safety of anyone not directly involved with the felling operation.

[\(see next section\)](#)

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[\(see Forms or Forms Samples\)](#)